

II. AMENDMENTS TO THE CLAIMS

1-15. (Canceled)

16. (Currently Amended) A method for production of a L-amino acid derived from a beta-aryl-substituted L-amino acid beta-aryl-substituted L-amino acid or beta-indole-substituted L-amino acid, comprising:

(a) fermenting an *E. coli* host cell that contains an isolated polynucleotide selected from the group consisting of:

(i) a nucleotide sequence as set forth in SEQ ID NO: 1; and

(ii) a nucleotide sequence encoding the polypeptide as set forth in SEQ ID NO: 2;

(b) expressing an *Arthrobacter aurescens*' L-N-carbamoylase from step (a); and

(c) contacting the L-N carbamoylase of step (b) with N-carbamoyl or N-formyl amino acids to produce L-amino acid derived from a beta-aryl-substituted L-amino acid a beta-aryl-substituted L-amino acid or beta-indole-substituted L-amino acid.

17. (Previously Presented) The method according to claim 16, further comprising the step of immobilizing the L-N-carbamoylase onto carriers.

18. (Previously Presented) The method according to claim 17, wherein the L-N-carbamoylase is covalently immobilized on EAH-sepharose.

19. (Previously Presented) The method according to claim 16, wherein the induction of expression of L-N-carbamoylase is by rhamnose, IPTG, or lactose.

20. (Previously Presented) The method according to claim 16, wherein N-formyl-D,L tryptophane, N-acetyl-D,L-tryptophane, and N-carbamoyl-D,L-phenylalanine serve as substrates for the L-N-carbamoylase.

21. (Previously Presented) The method according to claim 16, wherein the isolated polynucleotide is the *hyuC* gene of *Arthrobacter aurescens*.

22. (Currently Amended) A method for production of L-methionine comprising:

(a) fermenting an *E. coli* host cell that contains an isolated polynucleotide selected from the group consisting of:

(i) a nucleotide sequence as set forth in SEQ ID NO: 1; and

(ii) a nucleotide sequence encoding the polypeptide as set forth in SEQ ID NO: 2;

(b) producing expressing an *Arthrobacter aurescens*' L-N-carbamoylase from step (a); and

(c) contacting the L-N carbamoylase of step (b) with N-carbamoyl-L-thiencyanine N-carbamoyl-L-methionine to produce L-methionine.

23. (Previously Presented) The method according to claim 22, further comprising the step of immobilizing the L-N-carbamoylase onto carriers.

24. (Previously Presented) The method according to claim 23, wherein the L-N-carbamoylase is covalently immobilized on EAH-sepharose.

25. (Previously Presented) The method according to claim 22, wherein the induction of expression of L-N-carbamoylase is by rhamnose, IPTG, or lactose.

26. (Previously Presented) The method according to claim 22, wherein N-carbamoyl-L-methionine serve as substrates for the L-N-carbamoylase.

27. (Previously Presented) The method according to claim 22, wherein the isolated polynucleotide is the *hyuC* gene of *Arthrobacter aurescens*.

28. (New) A method for production of L-tryptophan, L-phenylalanine, or L-tyrosine, comprising:

(a) fermenting an *E. coli* host cell that contains an isolated polynucleotide selected from the group consisting of

(i) a nucleotide sequence as set forth in SEQ ID NO: 1; and

(ii) a nucleotide sequence encoding the polypeptide as set forth in SEQ ID NO: 2;

(b) expressing an *Arthrobacter aurescens*' L-N-carbamoylase from step (a); and

(c) contacting the L-N carbamoylase of step (b) with N-carbamoyl or N-formyl amino acids to produce L-tryptophan, L-phenylalanine, or L-tyrosine.

29. (New) The method according to claim 28, further comprising the step of immobilizing the L-N-carbamoylase onto carriers.

30. (New) The method according to claim 29, wherein the L-N-carbamoylase is covalently immobilized on EAH-sepharose.

31. (New) The method according to claim 28, wherein the induction of expression of L-N-carbamoylase is by rhamnose, IPTG, or lactose.

32. (New) The method according to claim 28, wherein N-carbamoyl-L-methionine serve as substrates for the L-N-carbamoylase.

33. (New) The method according to claim 28, wherein the isolated polynucleotide is the *hyuC* gene of *Arthrobacter aurescens*.

34. (New) A method for production of L-thienylalanine comprising:

(a) fermenting an *E. coli* host cell that contains an isolated polynucleotide selected from the group consisting of:

(i) a nucleotide sequence as set forth in SEQ ID NO: 1; and

(ii) a nucleotide sequence encoding the polypeptide as set forth in SEQ ID NO: 2;

(b) expressing an *Arthrobacter aurescens*' L-N-carbamoylase from step (a); and

(c) contacting the L-N carbamoylase of step (b) with N-carbamoyl-L-thienylalanine to produce L-thienylalanine.

35. (New) The method according to claim 34, further comprising the step of immobilizing the L-N-carbamoylase onto carriers.

36. (New) The method according to claim 35, wherein the L-N-carbamoylase is covalently immobilized on EAH-sepharose.

37. (New) The method according to claim 34, wherein the induction of expression of L-N-carbamoylase is by rhamnose, IPTG, or lactose.

38. (New) The method according to claim 34, wherein N-carbamoyl-L-methionine serve as substrates for the L-N-carbamoylase.

39. (New) The method according to claim 34, wherein the isolated polynucleotide is the *hyuC* gene of *Arthrobacter aurescens*.